## **Abstract**

The invention relates to a method for determining blood volume during extracorporeal blood circulation, which is based on measuring the propagation rate or propagation time of the pulse waves propagating in the extracorporeal circulation system. The invention preferably involves the measurement of the propagation rate or propagation time of the pulse waves generated by the blood pump, which is placed in arterial branch of the blood line. The device for determining blood volume can make use of the pressure sensor, which is placed in the venous branch of the blood line and which is already provided in prior art blood treatment devices. As a result, the amount of equipment required is relatively low.